

THE TECH

VOL. XXXII. NO. 19

BOSTON, MASS., TUESDAY, OCTOBER 22, 1912

PRICE TWO CENTS.

RAMSAY GIVES FIRST LOWELL INST. LECTURE

"Gases of the Atmosphere,"
Subject of Last Night's
Lecture.

Last night in Huntington Hall, Sir William Ramsay gave the first of his series of Lowell Institute lectures on "The Discovery of the Gases of the Atmosphere." At 8 o'clock the hall was filled, many of the audience being either students or instructors at the Institute.

Sir William Ramsay began by remarking that with the exception of one man all those who had played a part in the discoveries relating to the atmosphere were inhabitants of Great Britain. This one exception was Scheele.

He said that the oldest ideas as to the atmosphere were included in the scheme of four contraries, earth and air, fire and water. It was first Boyle in the early part of the seventeenth century who advanced the idea that the elements are the constituents of substances. He showed that the air possessed elasticity. The lecturer quoted from a book that Boyle wrote to show that Boyle in his guesses as to the nature of the air had expressed ideas not far from the truth as we now know it. In the latter part of Boyle's life John Mayow wrote about the atmosphere, but his work was forgotten for a century, and the advances that he made were lost to the world.

The next chemist to investigate the air was Hales, who performed a multitude of experiments, but from them drew conclusions that were of benefit to those interested in the composition of the air.

Soon after Hales' time came the phlogiston theory, first advanced by Stahl and his pupil Becker. This attributed to bodies that could burn an undefinable vaporous substance called phlogiston. In burning this was given off in the flame. This theory pervaded the language and works of chemists for many years.

The next advance in determining the composition of the air was made by Black, an Englishman. Black was the first one to use a balance in a reasonable way in the investigation of the air. He performed many experiments in a roughly quantitative way, and Sir William Ramsay repeated one of these last night, in accordance with Black's direction. It concerned the removal of carbon dioxide from magnesium carbonate by sulphuric acid, and its replacement by

(Continued to Page 2, Col. 2.)

CAPTAIN ELECTED.

Sophomore Relay Team Elects
A. B. Curtis to Lead It.

The 1915 Relay Team held its election yesterday at 1 P. M., in the Union, and elected A. B. Curtis on the first ballot. Curtis comes from the Providence Tech, where he ran cross-country and track. Last year he ran on the Freshman relay team here, and on the indoor track team. He is also good in high hurdles.

The relay team practices every afternoon at 4 P. M., at the Field. The preliminary time trials will be held October 24, and the finals on November 1.

NINETEEN FIFTEEN BALLOT IS NOW READY

Names of a Large Number of
Men to Appear on Ballot to be
Issued Next Monday.

BalLOTS for the election of officers to the Class of 1915 are now at the Cage and can be had for the asking. The election committee has given until Saturday, October 26, 1912, for the filling out of these ballots, and they must be in at the Cage before 4 o'clock of that day.

Dues that have not yet been paid may accompany the ballots, and important emphasis is laid on the point by the election committee that all ballots left unsigned will be void.

The ballot is as follows:

President—Edward E. Alt, Russell F. Fields, John S. Howkins, Jr., Percy M. Werlich.
Vice-President—Marshall B. Dalton, Arthur C. Hawgood, Francis P. Scully.
Secretary—Sidney E. Clark, Ralph L. Fletcher, William H. Gabeler.
Treasurer—Harold R. Crowell, Francis F. Fulton, H. Palmer Sabin.
Institute Committee—Charles A. Blodgett, Viking Enebuski, Francis C. Foote, Charles W. Fry, Herbert S. James, A. Stone Morrison, Theodore F. Spear, Francis J. Wall, Virgil E. Wardwell.

Executive Committee—Lawrence Davis, David M. Hughes, Terrence R. Johnson, Homer Rogers, Wilbur A. Swain, George Viuard.

Athletic Association—Arnold B. Curtis, Greville G. Haslam, M. Ebenezer Hill, John H. O'Brien, William B. Spencer, Wallace S. Thomas.

Clerk—Walter Africa, Thomas J. Parry, Henry L. Leeb.

ELECTRO-CHEMISTS.

Course XIV Men to Complete
Their Organization Today.

The Electro-Chemists will hold another meeting this afternoon at 5 o'clock, in the Union, to complete the organization of their society. The last meeting resulted in the practical certainty that the society will be purely social in its nature, it being thought that the membership of the course is not yet sufficient to justify asking noted men to speak before it, which would be the only object of a professional organization.

It is not unlikely that, when the course has grown larger, the society may become more professional in character, but for the present it will be devoted solely to promoting the social enjoyments of its members. This will, of course, be done in such a way that studies and other duties will not be interfered with.

MAIL AT THE CAGE

The following list contains the names of men having letters at the Cage, and it will be a great obligation to the man in charge and the members of the Union Committee if these men will call for their mail at their earliest convenience:
Wylde, W. A., Sabedo, A.,
Hastings, N. N., Steptinston, W.,
Vile, N. J., Small, F. S. (6),
Bundy, A. C. M., Burnham, E.,
McDaniel, J. B., de Vignal, M.,
Oberg, T., Brochet, W. H.,
de Fremery, Donald, Brochet, W. H. '15,

TENNIS TOURNAMENT STARTS THIS WEEK

Fourteen Men Have Entered in
Doubles and Thirty in
Singles.

The drawings for the Annual Fall Tennis Tournament have just been posted on the tennis bulletin board in the corridor of Rogers. Thirty men have entered for the singles and 14 for the doubles, from which a winning tennis team ought to be picked to the coming season.

All the men have not yet paid their entrance fee, and these must be paid before they can play in the tournament. The fees are 50 cents for the singles and 75 cents per team in the doubles, and can be left at the Cage for R. B. Haynes, '13. The first and second rounds of the singles and first and second of the doubles must be played off before October 28; the third round of the singles and second round of the doubles are to be played off before November 4. The fourth round of the singles and finals in the doubles are scheduled to be played off before November 11, while the finals of the singles must be finished by November 18. Any matches not played off before their scheduled dates will be forfeited.

Each contestant is to bring three balls with him and one set is to be played with and the other laid aside, the winner taking the unused set while the loser takes the dirty ones. The underclassmen in arranging matches and all those who failed to hand in their class are rated as 1916, which will hold for the whole tournament. The matches will be decided by the best two out of three sets. After a match is played one of the contestants is to get the "tennis key" from the information office and post the results himself.

(Continued to Page 2, Col. 2.)

SOPHOMORE TEAMS.

Tug-of-War Squad Rounding
Into Good Shape Now.

Just enough men to make up an eleven showed up at the Oval for Sophomore football practice last night. Instead of increasing, the squad seems to be diminishing in numbers, and Captain Scully wishes to see every man who can play football at the Oval any afternoon after 4 o'clock. He feels sure that there is a lot of good material in the class and would like to see some of it.

The following were on hand yesterday for practice: Scully, Howkins, MacDevitt, Fletcher, Boynton, Howlett, Morse, Fulton, O'Brien, Quirk, Walter, Rooney and Helseth. The usual work in tackling, falling on the ball, and running down under punts took place, ending up with a snappy signal practice.

The tug-of-war team is in the same fix concerning numbers, but those who are out are showing up in fine style. Most all the men of last year's team have been out, but about twenty-five more men are needed. The three coaches, Cromwell, '13, Breck, '13, and Carlson, '13, have been out with the men every day, and if their work tells the Sophomores ought to turn out a winning team on Field Day. The team practices every day in the Gym at 4 o'clock, except on Tuesday, when it is at 5 o'clock.

C. P. FOX WINNER OF HANDICAP MEETS

Scores Total of 44 Points With
Firsts in All the Field
Events.

C. P. Fox proved to be the star of the two athletic meets held for the men who were not on the regular track squad. He was far in the lead with the total number of points of 44; W. M. Africa took second place with 17, and E. E. Alt followed with 14. In several of the events, the 100, 220, 440 and the 880 yards, first place was tied between two men. These men will have to toss up for the medal. Medals will be given to the men holding first place in each event; but it has been decided to give none for the holder of the greatest number of points.

The medals will be awarded as follows: 100 yards, Reed and Crankshaw, tied; 220 yards, Adams and Clark, tied for first; 440, Burton and Curtis tied; 880, Stubbs and Gagnon, tied. Shot-put, Fox and Africa, tied. In each of these events a coin will be tossed to decide. Fox, winner of high and broad jumps, pole vault and discus throw, Africa, hammer throw.

The final summary of points, including both meets, is as follows:

Fox, 44; Africa, 17; Alt, 14; Curtis, 9; Gagnon, 9; Burton, 8; Adams, 8; Mangon, 5; Place, 5; Hall, 5; Stubbs, 5; Burnham, 5; Hines, 4; Huribut, 3; Baker, 3; Cromwell, 3; Spencer, 3; Dean, 3; McBride, 3; Fribus, 2; Goodell, 2; Reed, Morse, Lawrence and Uruphart, one apiece.

TRAINING TABLE.

A training table for the cross-country runners has been established at 175 St. Botolph street. Twelve men have already been entered. They will take only their lunches and dinners at this dining room. The reason that the table was established away from the Union was that the men will be by themselves and will have plenty of time to eat and will not be hurried by the bustle of the Union Dining Room. Furthermore, the men will get more exercise in going to and fro than they would to the Institute building.

The twelve runners already sitting at the table are: Captain Nye, Shedd, Lee, Hill, Best, Gaething, Wilkins, McDonald, Palmer, Benson, White and Bonney.

WEATHER.

Forecast for Boston and vicinity:
Today unscattered; rising temperature;
moderate easterly winds.

CALENDAR.

Tuesday, October 22, 1912.
1.25—Candidates for THE TECH—
Lower TECH office.
4.00—1915 Football—Oval.
4.00—1916 Football—Field.
4.00—1915 Relay Team—Field.
4.00—1916 Tug-of-War—Gym.
5.00—1915 Tug-of-War—Gym.
5.00—Electro-Chem. Society—Union.
4.15—Orchestra—Union.

Wednesday, October 23, 1912.
4.32—Hare and Hounds—Back Bay
Station.

CANDIDATES FOR THE TECH—TO-DAY—1.25 P. M.

THE TECH

Entered as second-class matter, Sept. 15, 1911, at the postoffice at Boston, Mass., under the act of Congress of March 3, 1879.

MANAGING BOARD.

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All communications should be addressed to the proper departments.

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TUESDAY, OCTOBER 22, 1912

NEW VICTROLA RECORDS.

The House Committee has expressed in its communication, which we publish today, the desire to cooperate with any men who wish to contribute toward purchasing some new records for the Victrola in the Union. Many have urged the establishment of a fund which will be put to this use, and it is hoped that a large number will contribute. Perhaps there is no one institution that gives so much pleasure about Technology as this. It is ready at all times for any man to run, whenever he is in the mood, and gives often times just the needed ten or fifteen minutes of recreation which we all enjoy during the spare time of a busy day.

T. C. A. WORK.

The Technology Christian Association are making in today's issue a call for men to take up the settlement work which is going on in Boston under various auspices. We sincerely hope that this call will be answered with the spirit of which it is worthy, and we believe with the officers of the association that every Tech man, however busy he may be, can, if he will, find a little time at least to do some unselfish work for some one else. We know that every man who volunteers will feel more than repaid for the slight expenditure of time that the work involves.

COMMUNICATION.

To the Editor of THE TECH:

The House Committee endorses most highly the suggestion of "R. B. D., '14," expressed in his communication which appeared in yesterday's issue of THE TECH.

All men desiring to contribute to a fund for the purchase of records may leave their money at the Cage for the House Committee.

Suggestions as to what records shall be purchased are solicited.

UNION HOUSE COMMITTEE.

TRINITY TECH NIGHT

This evening will be Tech Night at Trinity House, and all Tech Episcopalian are cordially invited to drop in. There will be some Brotherhood of St. Andrew men there to welcome all who come. Tech Night at the Trinity House is a weekly feature, and entertainments are being planned for a number of meetings, such as dinners, with well known speakers.

Remember that Dr. Mann extends a cordial invitation to all Tech Episcopalian to drop in at St. James avenue, especially Tuesday evenings.

T. C. A. WANTS MEN FOR SOCIAL SERVICE WORK

Many Openings for Tech Men—Great Variety of Work in Spare Time.

The Technology Christian Association is beginning an active campaign to get men to take up some form of social service. Calls are pouring in at the office for men to help in all kinds of altruistic work. If the T. C. A. sent a man to fill every place that is open to Tech men, the number thus engaged would probably mount up into the hundreds.

There is enough variety in the positions to satisfy any man. Teaching English to immigrants, giving talks on scientific, historical, religious or other subjects to boys, "big brother" work, in connection with the Boston Juvenile Court and elsewhere, organizing and leading boys' clubs in settlement houses, these four divisions of work, each with its own committee in the T. C. A., offer a multitude of opportunities.

Just now the boys' club work is in especial need of men. Last Thursday the chairman of this committee, Harold R. Bassett, gave a brief outline of the kinds of work for which men are wanted, and a similar outline here may help those who are considering whether the invitation to help meant them particularly.

The Boston Y. M. C. A., at its Italian Center, in Garibaldi Hall, 207 North street, wants a large number of men to teach manual training, to lead clubs in games and other sorts of recreation, to help in debates, dramatics and study and to lead gymnasium classes. Ellis Memorial, under the leadership of a Tech student, Z. Crocker, Jr., and Denison House, with Clyde R. Moulton, a former Tech man, call for men to do similar work. The Cambridge Neighborhood House, at 79 Moore street, Cambridge, wants a man to teach electricity any evening, once a week, and will take men who can teach other subjects. The South Bay Union, at 20 Union Park, calls for men to lead five clubs.

The members of the committee in charge of this work plan to see as many men as possible personally and to ask them whether they cannot find at least one hour a week to help some boys. But every Tech man knows how difficult such a canvass of the student body is, and the T. C. A. hopes that every student who is interested at all will either see the Secretary at the office, Room 5, Engineering B, H. R. Bassett, or C. H. Durkee, members of the committee, or if it is impossible to see one of these men, that they will write to them in the care of the Christian Association. Every man will be found a place.

LOWELL INSTITUTE.

(Continued from Page 1, Col. 1.)

the addition of an alkali carbonate. The discovery of carbon dioxide was first made by Black in experiments similar to these.

Then the lecturer took up the discovery of nitrogen by Rutherford at the end of the eighteenth century. Rutherford called it phlogisticated air. Soon afterward Priestley and Scheele independently discovered oxygen, or, as they called it, dephlogisticated air. Sir William Ramsay spoke at some length on the work that these two men accomplished, and he began an experiment mentioned by Scheele, leaving it until Thursday to complete itself.

He said that at the next lecture he will be able to show some of the lantern slides that were delayed at the custom house.

FRESHMAN COLORS.

Major Briggs, of the Advisory Council on Athletics, has announced that the Field Day colors for the Class of 1916 are crimson and black.

THE TECH

Morning Delivery

THE TECH is prepared to deliver the paper before 8 a. m. to all students rooming on the following streets—St. James Avenue, Newbury St. The Fenway, Westland Avenue, Huntington Ave., below Massachusetts Ave., St. Botolph and cross streets.

SEND A POSTAL TO CIRCULATION MANAGER

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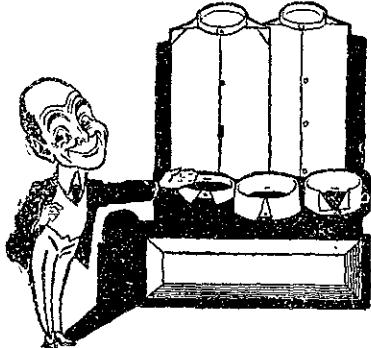


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QUICK SERVICE

ORCHESTRA REHEARSAL THIS AFTERNOON

Old Men To Rehearse Again—
New Men Wanted—Final
Tryout.

The Orchestra will rehearse this afternoon, Tuesday, October 22, at 4:15 P. M., in the dining room of the Union. As the Show is contemplating using the Orchestra in its productions this year it is essential that all men who wish to play in it must be present at this rehearsal. All of the old men who reported at the first meeting on October 15 will be present, and it is hoped that in addition there will be many new men.

Extra men are especially needed to play the viola, cello, cornet, trombone and traps. While there are already a number of men who have reported that are able to play these instruments, there are not as yet sufficient to carry their proportionate part in the work.

A second trial will be held for all of the men that are present. It is desired that the final composition of the Orchestra be, as nearly as possible, complete after the rehearsal this afternoon. All of the men will report to Manager D. M. Hughes, who is to be in charge of the Orchestra this year.

The competition for the Freshman assistant in the Publicity Department of the Show is now in full blast. Already fifteen men have reported and are carrying out their assignments as given. However, it is not yet too late for other men who have wanted to come out for this position and have not yet gotten around to it, to report.

All candidates should be present at the Show office at 4 o'clock this afternoon.

1914 PIPES READY

Class Pipes Are Now in the
Hands of the Committee.

The 1914 Pipe Committee has now received samples of the class pipes and are ready to take orders for them. The pipes are in the following different styles: Small army, small poker, large army, large poker, bent army, and half-bent or "jimmy pipe." The pipes are all fine, first grade briar pipes and are inlaid with 19T14 in the best silver inlaying that can possibly be obtained. The T is the official Technology letter.

All men wishing to procure class pipes are requested to see any of the following men: H. G. Storke, A. B. DeWitt, or A. H. Waitt, who will show the samples and take orders.

TENNIS TOURNAMENT.
(Continued from Page 1, Col. 3.)

The following are the drawings for the first rounds: Singles—J. V. Boas, '15, vs. K. W. Roy, '15; C. E. Shedd, '16, vs. E. H. Clarkson, '16; F. C. Foote, '15, vs. H. A. Sweet, '13; L. H. Zepfier, '15, vs. F. E. Edelstein, '13; D. E. Woodbridge, '16, vs. V. S. Mumford, '16; W. C. Eberhard, '14, vs. W. E. Ash, '15; T. C. Fisher, '13, vs. T. R. Oberg, '16; E. E. Sorti, '16, vs. E. M. Tolman, '13; E. W. Macy, '16, vs. A. Dursin, '16; F. Hurlburt, '14, vs. H. R. Stewart, '16; E. J. Kingsbury, '15; vs. J. R. Wirt, '15; P. Conner, '15, vs. F. H. Oehard, '13; G. W. Blakeley, '14, vs. J. B. Carr, '16; W. G. Turrell, '16, vs. Souter, '16; P. A. Russell, '14, vs. L. D. Bartlett, '13.

Doubles—Goodwin and Stuart, '14, vs. Sutherland and MacEmery, '16; H. R. Sweet, '13 and W. G. Tirrell, '16, vs. E. J. Kingsbury, '13, and K. W. Roy, '15; White, '16, Souther, '16, are bye; F. D. Bartlett, '16, and V. S. Mumford, '16, vs. G. W. Blakeley, '14, and F. Hurlburt, '14.

Heard in Sophomore physics: B. T. U. represents Boston Technology Units.

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Open Evenings to 9 o'clockGuess I'll have to see "Good Old Burke
the Tailor" pretty soon.That big brother of mine told me to be
sure to call on him at 18 School St., or to see
Tom Hayes at 843 Washington St., as soon
as I landed in Boston, and the bunch here tell
me that was good dope.**Classified Advertisements and Notices****HERRICK, COPLEY SQUARE****Choice Seats for all Theatres**

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Key Number Connecting Five Phones

FACULTY NOTICE.Third Year—Elements of Electrical
Engineering—Change of Recita-
tion Hour.Section F will change from Tuesday,
at 10 o'clock, to Wednesday, at 9, to
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WALTER HUMPHREYS,
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work in the week. Competent in ap-
plied electricity. Work to be done at
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for Field lockers please return as
soon as possible. (Signed) F. H.
Briggs.**PRECISION OF MEASUREMENTS.**The lectures in Precision of Meas-
urements for entering College Stu-
dents will be held on Mondays and
Fridays at 4 P. M., in Room 23, Walker
Building, during the first five weeks.
(8-tf) H. M. GOODWIN.FOUNTAIN PENS—Call at THE
TECH office and see our line of first-
class fountain pens at low prices, any
morning, 8.30 to 9.00.FOUND—A slide rule. Owner call
and identify it at THE TECH office.
(11-tf)FREE TICKETS to the Museum of
Fine Arts for the year 1912-13 will be
issued to students upon application
at the ticket office at the entrance to
the Museum. (6-tf)**GLEE CLUB CANDIDATES.**The Glee Club trials will be post-
poned until some time next week.
Notice of the new date will be given
later. All candidates watch THE
TECH.J. L. CHAMPAGNE'S All-College
Dancing Parties every Wednesday
and Saturday evenings. Lunder Gym-
nasium, 44 St. Botolph street, Boston.
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newly furnished and well heated
rooms with bath, convenience, you
can get a large room for two at \$5.00,
or a small front room for \$3.50.
(13-3t)1913 Class ballots may be obtained
at the Cage. They are due at 4 P. M.
Wednesday, October 30.1913 ELECTIVE COMMITTEE.
(19-8t)WILL all members of Phi Delta
Theta in Tech please send their ad-
dresses to Homer H. Berger, secre-
tary of the Harvard Phi Delta Club,
at 62 Perkins Hall, Cambridge.TECH SHOW ORCHESTRA re-
hearsal at 4.15 Tuesday, October 22,
in the Union. (Mon-Tues)**BEST PRICES**

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